

# ROCKY FLATS CLOSURE LEGACY CONTRACT APPROACH



THE CONCEPT OF PROJECTIZING THE CLOSURE WAS EVIDENT IN THE CONTRACT, THE BASELINE, AND THROUGH CONSISTENT INTERNAL AND EXTERNAL COMMUNICATIONS, SUCH AS THIS SIGN AT THE WEST ENTRANCE TO THE SITE.

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## INTRODUCTION

The [Rocky Flats Closure Contract](#)<sup>33</sup> between DOE and Kaiser-Hill LLC (K-H) was signed in January of 2000. It had the singular focus of completing the cleanup and closure of the Rocky Flats Environmental Technology Site (Site) in the safest, most cost effective manner with a target completion date of December 15, 2006. The terms and conditions of the contract reflect an important evolution in the approach to contract development at Rocky Flats over a number of years. This section will outline key changes in contracting policy within the Department of Energy at the Headquarters level and the resultant application of these policies specifically at the Rocky Flats Site. The experiences gained by both DOE and the K-H between the first contract awarded in 1995 and the final 2000 Closure Contract were significant. The following is the story of that journey and the refinement of the contract driving the successful cleanup and closure of the Site.

ACCELERATED CLOSURE CONCEPT  
CONGRESSIONAL SUPPORT  
REGULATORY FRAMEWORK  
**CONTRACT APPROACH**  
PROJECTIZATION

SAFETY INTEGRATION  
SPECIAL NUCLEAR MATERIAL  
DECOMMISSIONING  
WASTE DISPOSITION  
ENVIRONMENTAL RESTORATION  
SECURITY RECONFIGURATION  
TECHNOLOGY DEPLOYMENT  
END STATE AND STEWARDSHIP  
FEDERAL WORKFORCE  
STAKEHOLDER INVOLVEMENT

## DISCUSSION

### Contract Reform

Traditionally, DOE Management and Operating (M&O) contracts were cost reimbursable for operating Sites with a defined production mission and did not provide well-defined performance criteria or expectations for environmental cleanup and closure work. M&O contractors were relieved of most financial risk for poor environmental cleanup and closure efforts, creating few drivers for contractor accountability. Performance expectations were not clearly specified, contractors may not have been sufficiently incentivized to accomplish work, and performance measurement was typically subjective.

The [DOE's 1994 Contract Reform Initiative](#)<sup>2</sup> grew out of a number of efforts for the government as a whole to operate in a more business-like, fiscally sound and results oriented manner. Major elements of the initiative included emphasis on the use of performance-based contracting techniques and competition for the Department's major contracts. The initiative also stressed the adoption of commercial practices. The contract reform report issued in 1994, identified the upcoming Rocky Flats contract (expiring in 1995) as a target for implementing the recommendations included with the Report.

*Contract reform  
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### A New Contractor for a New Mission.

In late 1993 and early 1994, the Rocky Flats Field Office (RFFO) began developing its contract strategy, adopting and implementing the Contract Reform Report's recommendations. Since the change in the Rocky Flats mission from production to environmental clean-up, DOE had recognized that it would benefit from contracting with an environmental firm, a company that could bring innovations based upon expertise in environmental work, as opposed to a weapons production specialist. RFFO issued its Request for Proposal for the Performance Based Integrating Management Contract at a Vendors Conference it hosted in July 1994.

### Contractor Strategy to Compete

The joint venture company of Kaiser-Hill LLC was formed specifically in 1994 to bid on the five year Integrating Management Contract at Rocky Flats Environmental Technology Site. This contract was known as the [1995 Performance Based Integrating Management Contract \(PBIMC\)](#).<sup>37</sup> In competing for the contract, K-H's strategy was to align its expertise in environmental remediation and the execution of major projects from its parent companies to successfully achieve cleanup of the Site. Along with an emphasis on this expertise, K-H presented a unique commercial approach to integrating their subcontractors, as well as incentivizing employee performance through significant financial rewards. K-H made the corporate commitment to share 20% of their profits with employees to incentivize behavior. K-H's proposed incentive system was a radical departure from contemporary DOE contractor practices and strongly influenced DOE's subsequent choice on awarding the contract.

*Selecting a contractor with environmental remediation and commercial project management expertise, while in hindsight was not profound, marked a significant departure from past contracting practices.*

### Contractor Selection Process

The Rocky Flats Source Evaluation Board (SEB) decided, as part of its evaluation of proposals, to visit active project sites and schedule time to interview union officials involved with the project, as well as regulators overseeing the work. Once these discussions were complete, the SEB conducted its traditional question-and-answer session with key management personnel. The emphasis in this process was to verify how well the contractor was able to manage similar projects and send the message that DOE was committed to working effectively with a variety of relevant stakeholders.

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### Final Selection of K-H

As the final selection of the contractor for the 1995 PBIMC approached, the competition between K-H and Parsons was intense. Both proposed strong teams of prime contractors, subcontractors and key managers with significant, relevant experience. Both bidders improved their best and final offers. K-H's proposed performance measures were viewed as more challenging, and their incentive plans for both subcontractors and employees were viewed as more comprehensive and focused. K-H proposed an innovative labor-leasing approach, where steelworkers would remain K-H employees and be leased to subcontractors for work covered by the collective bargaining agreement. In this way, K-H avoided the anticipated problems associated with the disparate treatment of organized labor by various employers.

### **PERFORMANCE BASED INTEGRATING MANAGEMENT CONTRACT - 1995**

#### Departure from an M&O Contract

The 1995 Performance Based Integrating Management Contract (PBIMC) was a significant, intentional departure from the M&O contract format prevalent within DOE at the time. Other contracts had taken initial steps, but this contract was the first to fully incorporate the DOE's Contract Reform initiatives. The PBIMC abandoned the cost-plus-award-fee approach. Eighty-five percent of the PBIMC's fee was linked to the achievement of specific, objective performance measures. The remaining fifteen percent of the total fee was a fixed, base fee. M&O contracts provided advance payments to the contractors, through special bank accounts. The PBIMC required the contractor to finance its own performance and then submit traditional invoices for payment.

*The PBIMC was the first to fully incorporate the DOE's Contract Reform initiatives.*

#### Reduction in Risk Indemnification for Contractor

M&O contracts indemnified contractors for a wide variety of risks, some even going so far as to reimburse contractors for the cost of environmental fines and penalties. One of the major criticisms concerning this practice came to light following the 1989 FBI raid of Rocky Flats and the subsequent Grand Jury investigation. The contractor for the Rocky Flats Site at the time pleaded guilty to charges of environmental misconduct and as a condition of the plea bargain, was forced to pay the fine itself. The M&O contract at the time actually required DOE to reimburse Rockwell for the cost of the fine, yet this was overridden by the court ruling. The 1995 PBIMC eliminated any such indemnifications, although the indemnification afforded through the Price-Anderson Act for nuclear

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accidents continued to apply. Finally, the fees for the PBIMC were derived from Federal Acquisition Regulations (FAR) fee policies, to reflect the nature of the increased performance risk being undertaken, rather than the less generous DOE M&O fee principles.

### Innovations in Outcome Based Performance Measures

The 1995 PBIMC invoked the utilization of discrete “performance measures” defining specific outcomes or deliverables that the contractor was required to complete in order to earn fee. A process for development, negotiation, administration and verification of completion of performance measures was established. During the early stages of the 1995 PBIMC, various functional area managers within RFFO and the contractor’s organization had begun to develop performance measures. This process lacked the overall mission focus on Site cleanup and closure and created inconsistencies across functions and programs. Additionally, there were over 60 individual active performance measures at any one time, diluting the incentive for completion of mission critical activities. The process eventually became more structured.

*Final evolution to simplified, objective performance measures focused on overall Site closure led to consensus on the “Critical Few” performance measures, and eventually to end-state criteria.*

### Unintended Consequences of Performance Measures

Early experiences with these performance measures included unintended consequences as a result of the lack of focus on the more important closure mission activities. In many cases performance measures were poorly defined or misinterpreted, and RFFO often found itself in the position of having to clarify these measures. In one instance, RFFO set a performance measure to recycle cafeteria waste (plastics, glass, and aluminum cans). In response, the contractor assigned trashcan monitors to assure that recyclable waste was placed into the right receptacle. In another instance a performance measure was established for the removal of several old trailers from Site. The contractor moved the trailers off the Rocky Flats Site to a U-store-it lot adjacent to the Site. As a result of focusing on these specific measures, the contractor applied far too many resources under a cost-plus contract than appropriate for recycling sanitary waste and did not really accomplish the result RFFO intended with respect to the trailers (i.e., remove the trailers and sell the asset). These were lessons for both parties to refocus performance measures on more critical activities and keep the overall project goals in mind.

### Impact of Incentivizing Performance

DOE initially failed to realize the power the 1995 PBIMC held in driving contractor performance as a result of its incentivizing processes, and occasionally incentivized the wrong things. As illustrated above, the

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contractor focus on meeting performance goals was intense. Much of this energy derived from K-H's incentive systems, which were based on the employees' abilities to meet performance objectives. With twenty percent of the contractor's fee reinvested into employee incentive programs, the achievement of specific performance objectives gained much greater importance for individual managers.

#### Refinement of Performance Measures

The early experience with performance measures and their impact on incentives was also a frustration to the contractor. They often worked hard to do what RFFO defined in the performance measure, only to have difficulty getting credit when time for payment came because overall closure results may not have been as expected. These problems generally came from loose definitions of completion or complex wording that did not clearly define what was to be delivered. In one instance the contractor was required to dispose of all waste chemicals from a specific building. They completed the task for all known chemicals, and then found one additional, minor waste chemical just before the end of the performance period. They were not given credit for achieving the overall performance measure. As time progressed RFFO and K-H improved their processes for defining the outcomes and deliverables, strictly limiting the use of terms like "all" and utilizing pre-agreed inventories. Both parties learned to better define the intent of deliverables in contractual terms, avoiding confusion and loopholes such as the trailer disposal incident (K-H benefit) or the waste chemical incident (DOE benefit).

*Incentives for safety were transformed to penalties for poor performance; safety was an expected part of performance attached to all work and not a separate performance measure.*

#### "The Critical Few"

Another important facet of the learning process that occurred during the performance measure development was to reduce the number of performance measures to a "critical few" and to place significant fees on those to assure timely completion. The development of the closure project baseline made the job of selecting performance measures vastly easier and improved the linkages to the Site's mission. The number of annual performance measures was reduced from 60 in 1995<sup>12</sup> to less than 15 by the end of the contract in 1999.<sup>13</sup> Performance measures were only applied to direct mission accomplishments, such as the processing and stabilization of plutonium and deactivation of nuclear facilities. Support activities such as infrastructure operations, maintenance and business operations were typically not incentivized under the rationale that successful management of these activities "enabled" the achievement of the mission-direct performance measures. Incentives for safety, originally handled through a complex indexing protocol, were transformed to penalties for poor performance. In other words, safety became an

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expected part of performance attached to all work and not a separate performance measure to be incentivized.

### The Inspector General's Review of Incentives

Under the original 1995 PBIMC, DOE had a provision for the contractor to earn fees for cost savings. This program, known as the Cost Reduction Proposal (CRP) Program, was derived from value engineering principles. While good in concept, it became very difficult to administer and had the potential to be abused. Since there was no independent body of cost data for the type of work being performed at Rocky Flats, or a firm baseline for comparison, it became virtually impossible to validate most cost savings claims. The Project Lifecycle Baseline was simply too immature at this point to provide reliable information. Compounding this weakness in the CRP program was the fact that K-H had committed to share a significant percentage of its CRP earnings with employees. This intention to incentivize employee innovation was greatly undermined by the failures inherent in the CRP.

In 1997, DOE's Office of the Inspector General (IG) released a [report highly critical of the fee incentives in the 1995 PBIMC.](#)<sup>38</sup> The IG report specifically criticized the CRP program and, with the release of the report and subsequent media attention, much scrutiny was placed on the CRP's. Although RFFO and K-H disagreed with the details of the report and defended the program as worthwhile, the need to restructure fee incentives was clear. Eventually both parties accepted the fact that the CRP program was flawed and needed replacement.

### Gateways and SuperStretch Performance Measures

Performance-based incentives evolved from single fiscal year incentives into broader project completion expectations. Gateways and SuperStretches were two manifestations of this. The CRP Program evolved into a system known as the Gateway performance measures. Gateways carried forward the scope, but not the fee, for work scheduled but not completed in the previous year. This incentivized the contractor to complete all prior year work as quickly as possible; once this was complete they were allowed to achieve fee for current year activities. Ultimately the SuperStretch performance measure process supplemented the Gateways. The SuperStretch process provided incentive for the contractor to do more work than was originally planned and budgeted. SuperStretch performance measures included fees for specific mission critical work that were budgeted for out-years. In order to meet a SuperStretch performance measure and earn associated fees, the contractor first had to perform current-year baseline work for less than budgeted cost,

*SuperStretch performance measures ultimately became a better incentive to save money and get more work accomplished ...because resources were immediately reinvested into additional scope.*

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then redeploy those excess funds to other critical mission work and get that work completed. SuperStretch performance measures ultimately became a better incentive to save money and get more work accomplished than the CRP Program did because resources were immediately reinvested into additional scope. The cost-plus-incentive fee contract to come later in 2000 would encourage this kind of behavior across the totality of the project scope.

#### “Manage the Contract, not the Contractor”

An important paradigm shift for RFFO in changing from award fee contracting to incentive-based contracting was learning a different role in the business relationship associated with an incentive-based contract. Under the award fee relationship, RFFO provided incremental direction, sometimes on a day-to-day basis, and the contractor was rewarded for how well they responded to RFFO’s direction. Unfortunately, there was no formal mechanism that illustrated the cost of various courses of action to RFFO, and often RFFO lacked clear strategic goals leading to poorly defined plans. The business model reinforced under the award fee process led to scope growth and aversion to risk. DOE grew a large and bureaucratic management structure with many individual, functional “stovepipes” often sending the contractor in different directions. RFFO personnel at fairly low levels were allowed to direct the contractor’s activities and the contractor’s performance was measured using a very subjective process.

The 1995 PBIMC contract was a step change from previous arrangements. Early in the 1995 contract, the RFFO Manager rescinded the authority of low and mid-level DOE personnel in directing the contractor and implemented the Contracting Officer’s Representative designation for selected high-level management officials. This change limited the flow of conflicting and detailed direction from RFFO to the contractor and enabled better integration of the direction that was provided to the contractor. Additionally, the business arrangement between RFFO and the contractor provided better visibility of the cost of incremental RFFO direction for “nice-to-haves” and exceeding minimum contractual requirements.

A very central concept in the 1995 PBIMC was for RFFO to establish project direction and expectations in the contract clauses and allow the contractor to determine how work would be completed. RFFO direction and expectations for performance were clearly established in the contract clauses, rather than in day-to-day interface. Over the course of the 1995 contract, the contractor was allowed greater and greater flexibility to perform the contract and to be more efficient and effective. Once RFFO

*A paradigm shift for DOE to “Manage the Contract, not the Contractor,” allowed the contractor maximum flexibility to complete the project in the safest and most cost-effective manner.*

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became better at setting the contract outcomes and deliverables (i.e., project closure), stepping back and letting the contractor perform within the terms and conditions of the contract became easier. The systems to allow the contractor flexibility of completing project work did not exist as fully in the early stages of the 1995 PBIMC contracting period and were to evolve and change significantly over the ensuing five years.

### **CLOSURE CONTRACT - 2000**

#### Setting the Stage for the 2000 Closure Contract

In 1997, RFFO managers began reviewing their business strategy for the follow-on contract. First, they determined that this should be the last contract at Rocky Flats and planned for a contract to complete the closure project. Second, they needed a set of performance measures to overwhelmingly drive the Site to closure. As the performance measure process evolved through the 1995 PBIMC contract term, the limitations of an annual planning cycle became apparent. The final set of performance measures under the 1995 PBIMC encompassed two fiscal years, allowing RFFO to provide incentives tied to more important project milestones rather than to interim milestones. It was clear even at this point that the performance measure system needed a radical change. Finally, DOE RFFO wanted to incorporate provisions that incentivized the contractor to continually improve safety for workers and the public. Developing a contract to incorporate these objectives, RFFO settled on a cost-plus-incentive-fee contract with both a cost and schedule incentive.

#### Single Source Justification

The 1995 PBIMC was scheduled to conclude June 30, 2000. Throughout the duration of the 1995 PBIMC, K-H had made unexpected progress on the contract, and the Department had adopted the accelerated closure strategy. Concurrently, K-H was developing and RFFO was analyzing the early versions of a Closure Project Baseline. Looking at this, RFFO recognized that the year 2000 would likely be critical to the success of accelerated closure. A competitive procurement ordinarily requires at least a year of concentrated effort on the part of both DOE and any interested bidders. The individuals who would participate in such a procurement process, on both the DOE side and the contractor side, would be diverted from the closure effort, and such a distraction threatened to derail the accelerated closure schedule momentum.

Competing its major procurements was a critical objective of the Contract Reform initiative, and RFFO recognized that a sole source follow-on contract would require approval at the top of the agency. RFFO put its

*Sole Source  
Justification for  
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Closure  
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and contractor  
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with the closure  
mission.*

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case together, and carried the recommendation to DOE Headquarters. RFFO emphasized that K-H was performing well, even reaching the point where the company had submitted a credible and achievable closure project baseline, and that the accelerated closure schedule could not tolerate the disruptive impacts of a contract competition. In July 1999, Secretary Bill Richardson approved the sole source justification. By law, the Department was required to forward the decision to Congress for their information. In addition, DOE announced its decision publicly. Surprisingly, the announcement generated no significant negative responses, either from Congress or the public.

### Structuring the Negotiation Team for the 2000 Closure Contract

Once Secretary Richardson had approved sole source negotiations, DOE RFFO began putting together a team to develop and negotiate the new closure contract. The RFFO Manager designated team members from appropriate functional areas: Contracting, Legal, Project Management and Safety. In an unanticipated decision, the RFFO Manager requested that DOE-EM HQ assign Principal Deputy Assistant Secretary for EM as lead negotiator for the team. The intention was to show that DOE commitment to closure was a Department-wide effort, not simply a local Rocky Flats initiative. The parties strengthened this commitment with the negotiation of innovative provisions establishing firm requirements for Government Furnished Services and Items.

### Closure Contract

On January 24, 2000 the Rocky Flats Closure Contract between K-H and the Department of Energy was signed. The terms and conditions of the contract were a result of the experience of the parties over the previous 1995 PBIMC. The structure of performance measures, incentives and planning cycles had all transitioned to the Cost-Plus-Incentive-Fee contract format. An important aspect of the 2000 Closure Contract was its authorization of all project completion work at the time the contract was signed. The need to move from an annual planning cycle to a project completion focus was clear. Through the 2000 Closure Contract this concept was applied to all aspects of the project. [The Closure Project Baseline](#)<sup>39</sup> became recognized as the project plan and was used as the basis for the development of annual work plans. The 2000 Closure Contract included simplified terms and conditions to allow the closure project to be completed in an accelerated, efficient and cost effective manner.

*The DOE applied standard Project Management Measures to monitor project performance. Subjectivity was minimized.*

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### Standard Project Management Measures

The 2000 Closure Contract provided a few simple mechanisms to measure performance derived from standard project management earned value measures. Cost variance was used to determine cost performance to date against planned cost, and schedule performance was calculated through a modified earned value process. Since there were a large number of level-of-effort support activities on the Rocky Flats closure project, RFFO and K-H agreed to evaluate schedule performance on discrete mission activities such as facilities demolished, cubic meters of waste shipped, etc.<sup>40</sup> About twenty-five percent of the total project was selected as [Predetermined Work Activities](#),<sup>41,42</sup> for schedule variance calculation to determine provisional fee payments. This significantly streamlined the quarterly provisional fee payment process as compared to the performance measure process on the last contract.

### High Change Control Thresholds

The 2000 Closure Contract allowed the contractor even more flexibility to perform work with high thresholds for requiring DOE approval for work sequences or process changes. Under the 1995 PBIMC, the contractor submitted several hundred baseline change proposals per year and had to wait for RFFO's approval for each change to move resources. Under the 2000 Closure Contract, only a handful of change requests required RFFO approval. With the 2000 Closure Contract, the cost of any DOE directed change was very visible as it resulted in a request for Equitable Adjustment (REA) with definite cost and/or schedule impacts. DOE viewed the increased potential for REAs as one of the largest risks of this new contract type. The REA experience is discussed later in this document.

### Incentive Processes

Incentive practices for the contractor changed significantly to a project completion focus through the development of the 2000 Closure Contract. The employee incentive programs included in the 2000 Closure Contract involved both hourly and salaried employees and tied the payout into the overall closure project completion. The program structure provided for the payout of a smaller percentage of cash bonuses immediately with the remainder deferred until project completion. The profitability of the final project, controlled by cost and schedule performance, determined the actual value of the deferred payout. This program structure was designed to strongly motivate employees and align the entire workforce to "a relentless drive for closing the Site."

*Employee Incentive Systems were used which truly rewarded high performing individuals.*

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### Risk Sharing

The Rocky Flats 2000 Closure Contract contained a much greater level of risk for both parties than previous contracts. The contractor assumed more business risk for unknown conditions than any previous DOE contractor and the DOE assumed much greater contractual risk through its commitments to provide [Government Furnished Services and Items \(GFS&I\).](#)<sup>43</sup> Under the terms of the contract, the contractor could not claim changed conditions for any differing Site conditions including the level of contamination or other unknowns in Rocky Flats facilities. It was assumed that the contractor had ample time to perform due diligence during its previous years at Rocky Flats. The exception involved the waste impact of undetermined contamination levels in subsurface soils. K-H accepted responsibility for the additional waste above the estimated values up to a specified total waste quantity for the entire project, with DOE accepting the responsibility for greater volumes. Conversely, the DOE assumed the responsibility to provide receiver Sites for the nuclear materials and waste generated during the project. [The risk to both parties was captured through the 70/30 \(government/contractor\) cost-sharing ratio for cost underruns and overruns.](#)<sup>44</sup> The cost sharing provision was a standard feature of a Cost-Plus-Incentive-Fee contract.

A key feature of the Rocky Flats 2000 Closure Contract was the level of commitment made by DOE. For the first time, the DOE made specific commitments about what it would provide and when it would be provided. The most critical items provided by DOE were the receiver Sites for Special Nuclear Material and radioactive waste. DOE also provided transportation services, shipping containers, utilities, records repositories, safety document reviews and approvals, and other miscellaneous items. The contract spelled out specific quantities and dates for delivery of the GFS&I. A process for the contractor to make specific requests for GFS&I and the DOE to provide a response as to what it could and could not provide was established. Finally, under Contract C.5, Statements of Commitment, [the government was committed to support K-H in finding ways to streamline the process and eliminate non-value added requirements.](#)<sup>45</sup> recognizing that the 70/30 cost sharing made such actions clearly in the government's best interest despite the increased contractor fee.

DOE was fairly successful in delivering GFS&I. Being able to provide receiver Sites for radioactive waste and nuclear materials was significantly influenced by forces outside of the DOE (i.e., the public/regulatory process) and proved to be an ongoing challenge for the DOE. Being accountable for specific commitments has galvanized the department into action. Failure to deliver GFS&I would have had quantifiable contract

*Risk sharing between the contractor and DOE drove true accountability for project performance. Not meeting project commitments for either party had significant and readily apparent consequences to the success of accelerated closure.*

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implications, resulting in REAs by the contractor. Fortunately, the DOE has been able to use the cost impacts of not providing GFS&I to stimulate action.

### REA Experience

The possibility of REAs was a great concern to DOE. The Closure Contract incorporated strong commitments by DOE to provide GFS&I, along with standard FAR contract provisions that protected the Contractor from unforeseen conditions. Early on, however, both parties recognized that significant increases in the contract's targets for cost and schedule would benefit neither side. DOE and K-H management agreed that, to the extent practicable, a better approach to equitable adjustments would be to revise non-financial contract terms rather than to merely increase the target cost or extend the target schedule. Also, both parties worked together to tightly control both DOE's issuance of contract direction and the K-H response to such direction. Whenever DOE direction had the potential to increase cost or extend schedule, K-H implemented change accounting practices to estimate and control the impacts. Both parties met regularly to monitor the potential changes. Through these techniques, the number and impact of REAs were held to reasonable levels. Upon physical completion, the impact on target cost and schedule was minimal. Six contract modifications were issued to incorporate equitable adjustments, increasing the target cost by a total of \$23.7 million or 0.6% of the original target cost. No extension of the target schedule was incorporated.

*DOE proposed...to extend the range of incentive effectiveness and provide adequate profit motive for K-H to achieve all possible cost and schedule incentives.*

### Fee Restructuring Modification

By late 2002 and early 2003, DOE's analysis of K-H's cost and schedule projections, based upon monthly progress reports submitted by the Contractor and confirmed by RFFO subject matter experts, indicated that K-H might be capable of achieving the maximum cost and schedule incentives in the Contract. Some RFFO subject matter experts believed that the Contractor could achieve significantly greater cost and schedule efficiencies. However, the existing Contract fee structure would provide no additional profit motive for such efficiencies. DOE proposed the negotiation of a Contract modification to extend the range of incentive effectiveness and provide adequate profit motive for K-H to achieve all possible cost and schedule incentives, while ensuring safe closure of the Rocky Flats Site.<sup>46</sup> After substantial discussions, Headquarters approved the request and Contract Modification M116 resulted. The original Contract fee arrangement included a cost-sharing arrangement that extended from a cost of \$3.563 Billion to \$4.796 Billion. Contract Modification M116 revised this to provide cost-sharing from a cost of

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\$3.122 Billion up to \$4.859 Billion. In return for the opportunity to earn higher maximum fees, K-H agreed to forego its rights to higher target fees on 14 REAs. Contract Modification M116 made no changes to the Contract's target cost or target schedule. [RFFO also selectively used non-fee bearing contract funding to access K-H resources in specific areas.](#)<sup>47</sup> The variable payout of fee based on quarterly earned value, initially viewed as an incentive to potentially improve contractor cash [flow turned out to cause problems within the DOE funding process and provided little increased incentive.](#)<sup>48</sup>

### Project Inspection and Acceptance of Physical Completion

More than a year before project completion, RFFO and K-H staff began discussing the imminent declaration of physical completion under the Contract. It was apparent that while the Closure Contract was clear in its description of physical completion, it was not explicit in how the Contractor was to go about documenting the physical completion. In addition, there was a need for interpretation of some technical requirements, as mentioned in Contract Clause H.2, Technical Direction. Most importantly, DOE needed to provide direction regarding what structures (roads, utilities, buildings, etc.) the Contractor was expected to leave in place at physical completion.

RFFO and K-H began discussing these issues, going through each of the seven criteria of physical completion set forth in the Closure Contract, Section C.1.2, Mission and Physical Completion of the Contract. For each criterion, the parties discussed and agreed upon the documentation needed to demonstrate physical completion, the processes by which RFFO would confirm completion and provide response to K-H. In addition, the parties discussed certain other Contract requirements that did not necessarily fall into one of the criteria for physical completion. For example, Contract Section C, Technical Exhibit A, Detailed Description of Scope and Services, Paragraph IV, Environmental Remediation, required: "The Contractor shall prepare the necessary decision documents supporting accelerated actions, consistent with RFCA, and a draft RI/FS, including a draft comprehensive risk assessment and complete all actions required by the approved decision documents to remediate soil, surface water, ground water, and other contaminated media." The draft RI/FS was an important Contract deliverable, so the parties identified its format and a review/acceptance process.

These discussions evolved into an [Omnibus Agreement](#)<sup>210</sup> outlining the Contractor's documentation of physical completion, and the Government's acceptance process. As the discussions proceeded, and the Omnibus Agreement was being drafted, an important factor became the Omnibus

*While the Closure Contract was clear in its description of physical completion, it was not explicit in how the Contractor was to go about documenting the physical completion.*

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Agreement itself. The RFFO Manager, RFFO Chief Counsel, and RFFO Contracting Officer made it clear time and again that the Omnibus Agreement was *not* a Contract modification, and that if there were any conflicts between the two documents, the Contract would prevail. Eventually, statements to this effect were included both in the cover memorandum for the Omnibus Agreement, and in the second paragraph of the Omnibus Agreement itself.

An interesting reflection of lessons learned is how the same topic was treated in the closure contract for the Fernald facility. Negotiated about six months after the Rocky Flats Closure Contract, it required development of a contract completion and transition document. This was a clear improvement for Fernald, and a case where the development of the Omnibus Agreement for Rocky Flats had to be developed as an ad hoc initiative under the “Statement of Commitment” clause, where at Fernald it was called out as a clear contract requirement.

With the Omnibus Agreement in place, K-H achieved the seven elements of physical completion, submitting the required documentation as work proceeded. This process enabled DOE to monitor K-H activities very closely with greater attention to those items that would ultimately require DOE verification. This focus also allowed the RFFO staff which were continuing to reduce in number, to focus their oversight in a manner that would enable the DOE to complete its confirmation of physical completion in a timely manner. K-H declared physical completion on October 13, 2005. Due to the continuing verification and oversight processes defined by the Omnibus, the DOE completed its inspection well within the contractual requirements, and accepted the project as complete on December 7, 2005. In hindsight, the Omnibus Agreement, which had been initially viewed as a good planning practice, was absolutely essential for the DOE to meet its contractual deadlines. The pace of activities requiring oversight and verification by the RFFO during the last few months of the project, and at declaration of physical completion, would not have been possible to verify without the structure, processes, and advance efforts developed in the Omnibus.

### **KEY SUCCESS FACTORS**

The evolution of the Contract Approach process at Rocky Flats resulted in its final form as the 2000 Closure Contract and was enabled by numerous events from 1994 onward. Analyzing which key factors drove the success of the effort revealed the following to be important:

*The Fernald Closure Contract required development of a contract completion and transition document.*

*The Omnibus Agreement allowed the RFFO staff which were continuing to reduce in number, to focus their oversight [to] enable the DOE to complete its confirmation of physical completion in a timely manner.*

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1. DOE Contract Reform and transition to performance-based contracting techniques was essential to the success of the accelerated closure concept.
2. Selecting a contractor with environmental remediation and commercial project management expertise, while in hindsight was not profound, marked a significant departure from past contracting practices.
3. Final evolution to simplified, objective performance measures focused on overall Site closure led to consensus on the “Critical Few” performance measures, and eventually to end-state criteria.
4. A paradigm shift for DOE to “Manage the Contract, not the Contractor,” allowed the contractor maximum flexibility to complete the project in the safest and most cost-effective manner.<sup>49</sup>
5. The DOE applied standard Project Management Measures to monitor project performance. Subjectivity was minimized. This could only be done with a robust, trusted baseline; otherwise it would have been an invitation for contractors to game the system.
6. Employee Incentive Systems were used which truly rewarded high performing individuals and created positive drive for safe and successful project completion throughout the contractor organization.
7. Sole Source Justification for awarding K-H the 2000 Closure Contract enabled valuable DOE and contractor resources to remain engaged with the closure mission.
8. Risk sharing between the contractor and DOE drove true accountability for project performance. Not meeting project commitments for either party had significant and readily apparent consequences to the success of accelerated closure.
9. Requests for Equitable Adjustment (REAs) can be controlled and minimized by continual attention and control by DOE and the contractor on the actions and conditions that give rise to REAs. This goes beyond change control, to understanding and controlling aspects of the site systems that cause the REAs.
10. A cost-plus-incentive-fee (CPIF) contract is not static and may need to be adjusted. The fundamental reason for a CPIF contract is to provide a balance of positive and negative incentives. If conditions change to the point where the incentive no longer functions as intended by the contract structure, the incentive range may need to be adjusted.

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11. Contract verification and acceptance by the DOE is a difficult and complicated process with many tasks. Early advance planning to structure and organize the inspection process is vital to allow the DOE to meet its contractual obligations in a timely manner.

### ***REFERENCES***

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<a href="#">Rocky Flats Baseline Performance Review Report, June 2005, Appendix A, LL - 25 Federal Worker Mindset.</a>	<a href="#">49</a>
<a href="#">Attachment A, <i>Omnibus</i> Agreement Regarding Accelerated Closure Contract Issues (<i>Omnibus</i> Paper), Revision 5, March 2005.</a>	<a href="#">210</a>